



THENOW

BROCHURE

Stock No.:834706
www.thenowair.com

Service hotline:400 187 8599
E-mail:info@thenow.cn
Shanghai Thenow Purification Technology Co.,Ltd

Wine Cellar Cooling System





PART I

Wine Storage



Wine Storage Options

There are three main ways to store your bottles of wine safely and securely:

Wine cellar – this is the ideal way to store your wine bottles, temperature and humidity controlled ideally. Wine cellars are a cost effective solution for storing wine and are bespoke from one home to another.

A makeshift closet wine cellar – this is ideal for wine lovers and enthusiasts. It is a simple and quick way to store your wine bottles in any size space (small or large) in your house.

A makeshift closet wine cellar is perfect for an everyday drinker but not as effective as long term storage.

A wine cabinet or refrigerator – these are reliable ways to maintain the temperature of your wine bottles and are a worthwhile investment for wine professionals and wine merchants.

Factors Pronounced Effect On Wine Storage

Storage of wine is an important consideration for long-term aging. While most wine is consumed within 24 hours of purchase, fine wines are often set aside for long-term storage. Wine is one of the few commodities that can improve in flavour and value with age, but it can also rapidly deteriorate if kept in inadequate conditions.

Proper storage comes with several factors namely temperature, humidity, storage stability, the presence of light, bottle positioning, and keeping wine away from strong odors etc. Constant temperature and proper humidity have the most pronounced effect on long time wine storage.

Wine Storage Temperature&Humidity Guide

Temperature

Red wines are robust and slightly more resistant to heat than whites, thus the ideal storage temperature for such ranges from 10 – 15°C (50 – 59°F). Whites accept the given range, but some purists store them at slightly cooler temperatures ranging from 7 – 10 °C (45 – 50 °F) just to be safe.

According to some experts, storing wine at around 15 – 20 °C is perfectly safe, provided that the temperature does not fluctuate. Fluctuations in temperature will cause the liquid to expand and contract, disrupting the molecules and adversely affecting the chemical reactions within the wine. Air molecules may give the tittle a “raisin-like” or stewed flavor.

Humidity

Humidity should be kept at around 65-75% RH. This way, the corks are kept tight for long periods.



Ideal Temperature&humidity For Some Wines:

Wine	Ideal Temperature	Ideal Humidity
Sweet & Semi-sweet Red Wine	14 - 16°C	65%-70%
Dry Red Wine	16 - 22°C	
Semi-dry Red Wine	16 - 18°C	
Dry White Wine	8 - 10°C	
Semi-dry White Wine	8 - 12°C	
Sweet & Semi-sweet White Wine	10 - 12°C	
Brandy	<15°C	
Champagne(Sparkling Wine)	5-9°C	
Wine storage proper temperature is around12°C,but temperature range from 7 - 18°C just to be safe.		

What Is The Difference Between A Regular Air Conditioner And Wine Cellar Cooling System?

- 1/

Regular air conditioners are meant to go down to 18°C, possibly 16°C at the lowest. But wine is meant to be stored at around 12°C in order to age and evolve properly.
- 2/

Standard AC units are built to cool the air quickly and to draw the humidity out of the air to make the room feels comfortable.The humidity helps to keep corks moist. While the wine cellar cooling units are designed to cool the air at a much slower rate to maintain the humidity in the room
- 3/

Normally wine cellar cooling units are always designed to run all year round without interruption. However,the failure rate of standard AC units is very high at such a frequency running
- 4/

Humidification is optional for Thenow’ s wine cooling units,this is obviously a normal AC unit cannot provide

PART 2

About Thenow



THENOW INTRODUCTION

Stock code:834706

Thenow brand belongs to Kapital Group which was founded in Singapore, Kapital have been focusing on technology innovation, intelligent technology, high performance, excellent quality of the constant temperature and humidity system and fresh air ventilation system, relying on excellent R&D manufacturing ability and operations capability, Thenow has completed the product layout of fresh air ventilation system, ventilating dehumidification system, wine cellar cooling system and total air system etc., all are committed to improving people's living environment and conditions.

Manufacturing Advantages

Our factory is located in Tinglin town Industrial park Jinshan District, Shanghai, covering an area of 53,300 square meters and with annual output more than 500,000pcs. Besides, we have strong R&D team and state-of-the-art laboratories equipped with the most complete and professional instruments. Our products include wine cellar climate control system, fresh air ventilation system, total air system (constant temperature and humidity) and so on. And our factory totally have 4 production lines now, besides, we also have our own workshops for metal plates process, ex-change core and air filters production. We aim at becoming a world leading manufacturer in this area.

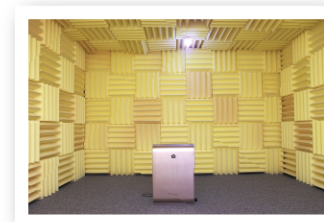


R&D Ability

Thenow R&D center have more than 50 experienced and professional engineers. Many of them have more than 10 years industry experiences. Meanwhile, Thenow jointed Shanghai Jiaotong University and Stanford University, setting up academic research center preparing talents and technical reserve. And we established a series of professional laboratories: enthalpy difference lab, 3m³ cabin (test noxious gas and microorganism), 30m³ (test performance of machine), Noise lab, wind tunnel lab, high and low temperature lab, aging lab, nanometer dust lab etc.



30m³ Test Room



Noise Test



Aging Test



Enthalpy Difference



Wind Tunnel, Drop, Vibration



3m³ Test Room

PART 3

Wine Cellar Cooling System

WINE CELLAR COOLING UNITS SELF-CONTAINED

Thenow wine cellar cooling units self-contained is best suited for home or light commercial proper wine storage. This unit is intended for use in cabinets or smaller wine storage rooms up to 15 cubic meters. Designed to lower the temperature at its best scope 10~16 degree centigrade, and maintains the humidity at optimal levels, between 50 and 75 percent. There are cabinet cooling units with optimized bottom return air and top return air, it is free to install the unit in the top and bottom of the cabinet. Multiple options of rear or top or bottom return grille with little duct work are convenient for various wine room installations.

Features



Condenser and evaporator combined inside one appliance, easy and fast to install.



Full touch smart controller ,support Wifi,APP.



Suitable temperature between 10~16°C and humidity maintenance within 50~70% RH.



Unique appearance design, no vibration, lower noise.



Commercial-grade, corrosion resistant components and spray painting frame for long-term durability.



Build-in wet film humidifier and heater, maintaining constant temperature and humidity.



Technical Datas

Model	Unit	HSN-JC3-Z	HSN-J15-Z
Cellar Size	cu ft	0-106	106-530
Horse Power	P	0.3	0.5
Power	V/Hz	115/60	
Cooling	BTU/H	1000	2000
Heating（Electrical）	BTU/H	2730	3410
Cooling Mode Current	A	2.1	2.5
Heating Mode Current	A	7	8.8
Minimum Current	A	9.6	12
Air Flow	CMH/CFM	100/60	200/120
Internal Fan	AW	0.16/18	0.27/31
Static Pressure	Pa	/	20
Noise	dB（A）	38	42
Refrigerant		R134a	
Controller	PC Full-touch smart control		
Temperature	℃	10-16℃, ±2℃	
Humidity	℃	50~70%, ±5%	
Total Power	KW	1	1.5
Humidifier	Type	/	Wet-film
Humidification	Kg/h	/	1
Condenser	Type	Hydrophilic aluminum foil	
Evaporator	Type	Hydrophilic aluminum foil	
Indoor Unit	L*W*H（inch）	22.1*16.4*11.9	45.7*17.4*13.8
Outdoor Unit	L*W*H（inch）	/	/
Tube Connection	Liquid（inch）	/	/
	Gas（inch）	/	/
Condensate Pipe	inch	3/4	3/4


Test conditions: Outdoor temperature 35 °C, wet bulb temperature 24 °C, indoor temperature 16 °C, and relative humidity 60%.


WINE CELLAR COOLING UNITS SPLIT SYSTEM


Thenow wine cellar cooling units split system is intended for cellars without access to proper ventilation. They are known for their efficiency and longevity. Each unit is designed to maintain a consistent temperature and humidity in spaces where proper ventilation is not feasible. The units are functionally divided into two sections, the evaporator and the condenser. The evaporator is installed inside and the condensing unit can be placed as far as 30m away with external ductwork connections. Since it exhausts outside, split cooling systems operate quietly and reduce vibration inside the cellar, which is believed to negatively affect the quality of wine.





Features


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Auto cooling and heating mode, keep wine cellar under constant temperature
- 


The evaporator is nickel plated for corrosion protection
- 

Adopt circulating water wet-film auto control humidification system,wet film is made of Swedish organic polymer material with sterilization and disinfection function
- 

Full touch smart controller. support Wifi,APP.
- 

Pull-out design wet film module, easy to replace
- 

Control constant condensation temperature
- 

Can be ceiling mounted, rack mounted, or floor mounted
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Three speed air flow under auto control to maintain the ideal environment for long-term wine storage



Technical Datas

Model	Unit	HSN-J15	HSN-J30	HSN-J60	HSN-J90
Cellar Size	cu ft	106-530	353-1059	1059-2118	2118-3178
Horse Power	P	0.5	1	2	3
Power	V/HZ	115/60			
Cooling	BTU/H	2000	4600	11940	19110
Heating (Electrical)	BTU/H	3410	5460	10240	22475
Cooling Mode Current	A	2.3	3.8	8.7	12
Heating Mode Current	A	8.8	14.1	26.5	53
Minimum Current	A	11.7	18.9	37.3	68
Air Flow	CMH/CFM	200/120	440/260	700/435	900/520
Internal Fan	A/W	0.27/31	0.35/40	0.53/60	0.88/100
Static Pressure	Pa	20	30	30	40
Noise	dB (A)	40	50	50	53
Refrigerant		R134a	R410a	R410a	R410a
Controller	PC Full-touch smart control				
Temperature	℃	10-16℃, ±2℃			
Humidity	℃	50~70%, ±5%			
Total Power	KW	1.7	2.9	4.4	8.9
Humidifier	Type	Wet-film			
Humidification	Kg/h	1	2	2	4
Condenser	Type	Copper tube copper fin			
Evaporator	Type	Hydrophilic aluminum foil			
Indoor Unit	L*W*H (inch)	34.9*14.7*12.4	37.2*31.1*11.9	53*31.2*11.9	60.9*31.1*11.9
Outdoor Unit	L*W*H (inch)	27.6*11.9*18.2	33.9*11.9*21.3	33.9*11.9*21.3	37.8*14.2*33.9
Tube Connection	Liquid (inch)	1/4	1/4	3/8	3/8
	Gas (inch)	3/8	3/8	1/2	5/8
Condensate Pipe	inch	3/4	3/4	3/4	3/4

Test conditions: Outdoor temperature 35 °C, wet bulb temperature 24 °C, indoor temperature 16 °C, and relative humidity 60%.

PART 4

Cases

